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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/072,892	02/12/2002	Hirohisa Tasaki	1163-0390P	3563

2292 7590 01/30/2006

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EXAMINER
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AZAD, ABUL K

ART UNIT	PAPER NUMBER
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2654

DATE MAILED: 01/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/072,892	<b>Applicant(s)</b> TASAKI, HIROHISA	
	<b>Examiner</b> ABUL K. AZAD	<b>Art Unit</b> 2654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 November 2005.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 3-12 and 15-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3-12 and 15-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

1. This action is in response to the communication filed on November 3, 2005.
2. Claims 3-12 and 15-21 are pending in this action. Claims 18 and 19 have been amended. Claims 1-2 and 13-14 have been canceled.
3. Applicant's arguments with respect to claims 3-12 and 15-21 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

5. Claims 3-21 are rejected under 35 U.S.C. 102(a) as being anticipated by Yasunaga et al. (US 6,330,534).

As per claim 18, Yasunaga teaches, "a speech coding method of selecting an excitation mode from a plurality of excitation modes, and encoding an input speech frame by frame with a predetermined length by using the excitation mode selected" (Fig. 22), said speech coding method comprising the steps of:

"encoding in the respective excitation modes a target signal to be encoded that is obtained from the input speech, and outputting coding distortions involved in the encoding" (col. 40, line 54 to col. 42, line 56);

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“comparing the coding distortions output by the step of encoding a threshold value” (col. 41, lines 34-67);

“converting the coding distortions output by the step of encoding so as to suppress selecting the excitation mode which gives a compared result that the coding distortion is greater than a threshold value at step of comparing” (col. 41, lines 34-67); and

“selecting the excitation mode in response to the coding distortions involved in the encoding and a compared result at the step of comparing” (col. 41, lines 34-67).

As per claim 19, Yasunaga teaches, “a speech coding method of selecting an excitation mode from a plurality of excitation modes, and encoding an input speech frame by frame with a predetermined length by using the excitation mode selected” (Fig. 22), said speech coding method comprising the steps of:

“encoding in the respective excitation modes a target signal to be encoded that is obtained from the input speech, and outputting coding distortions involved in the encoding” (col. 41, line 54 to col. 42, line 56);

“selecting one of the excitation modes in response to a compared result obtained by comparing the coding distortions involved in the encoding” (col. 41, lines 34-67);

comparing the coding distortion corresponding to the excitation mode selected at the step of selecting with a threshold value (col. 41, lines 34-67); and

“replacing the excitation mode selected at the step of selecting, in response to a compared result obtained at the step of comparing” (col. 41, lines 34-67).

As per claim 3, Yasunaga teaches, "the threshold value is one of a fixed threshold value and a threshold value that is determined in response to signal power of the target signal to be encoded" (Table 3).

As per claim 4, Yasunaga teaches, "wherein the threshold value is prepared for each excitation mode" (col. 41, lines 34-67).

As per claim 5, Yasunaga teaches, "a step of converting replaces the coding distortion with the threshold value, when a compared result obtained at the step of comparing indicates that the coding distortion by a predetermined excitation mode is greater than the threshold value, wherein the step of selecting selects an excitation mode corresponding to a minimum coding distortion among the coding distortions of all the excitation modes including the coding distortion replaced at the step of replacing" (col. 41, lines 34-67).

As per claim 6, Yasunaga teaches, "wherein the step of replacing selects a predetermined excitation mode when the coding distortion corresponding to the excitation mode selected at the step of selecting is greater than the threshold value" (col. 41, lines 34-67).

As per claim 7, Yasunaga teaches, "the threshold value is set at a value constituting a predetermined distortion ratio to one of the input speech and the target signal to be encoded" (col. 41, lines 34-67).

As per claim 8, Yasunaga teaches, "the step of deciding characteristic of speech by analyzing at least one of the input speech and the target signal to be encoded, wherein converting converts the coding distortions output by the step of encoding only

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when the step of deciding outputs a predetermined decision result" (col. 41, lines 34-67)).

As per claim 9, Yasunaga teaches, "deciding characteristic of speech by analyzing at least one of the input speech and the target signal to be encoded; and calculating a threshold value in response to a decision result at the step of deciding, wherein the step of comparing carries out its comparison using the threshold value calculated at the step of calculating the threshold value" (Fig. 22).

As per claim 10, Yasunaga teaches, "wherein the step of deciding makes a decision as to whether characteristic of speech is onset of speech or not" (col. 12, lines 10-49).

As per claim 11, Yasunaga teaches, "wherein the plurality of excitation modes comprise an excitation mode that generates non-noisy excitation and an excitation mode that generates noisy excitation" (Fig. 22).

As per claim 12, Yasunaga teaches, "wherein the plurality of excitation modes comprise an excitation mode that uses non-noisy excitation codewords, and an excitation mode that uses noisy excitation codewords" (Fig. 22).

As per claims 15-17, 20 and 21 they are interpreted and thus rejected for the same reasons set forth in the rejection of claims 3-12 and 18-19.

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**Contact Information**

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Abul K. Azad** whose telephone number is **(571) 272-7599**. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richemond Dorvil**, can be reached at **(571) 272-7602**.

Any response to this action should be mailed to:

**Commissioner for Patents**

**P.O. Box 1450**

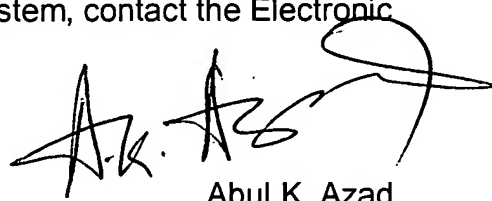
**Alexandria, VA 22313-1450**

Or faxed to: **(571) 273-8300**.

Hand-delivered responses should be brought to **401 Dulany Street, Alexandria, VA-22314** (Customer Service Window).

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January 23, 2006

A handwritten signature in black ink, appearing to read 'A.K. Azad', with a large, sweeping flourish extending from the end of the name.

Abul K. Azad  
Primary Examiner  
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